# 2007 Yakutat Set Gillnet Fishery Management Plan

by

Gordon F. Woods

**May 2007** 

Alaska Department of Fish and Game





#### **Symbols and Abbreviations**

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Weights and measures (metric)		General		Measures (fisheries)	
centimeter	cm	Alaska Administrative		fork length	FL
deciliter	dL	Code	AAC	mideye-to-fork	MEF
gram	g	all commonly accepted		mideye-to-tail-fork	METF
hectare	ha	abbreviations	e.g., Mr., Mrs.,	standard length	SL
kilogram	kg		AM, PM, etc.	total length	TL
kilometer	km	all commonly accepted		<u> </u>	
liter	L	professional titles	e.g., Dr., Ph.D.,	Mathematics, statistics	
meter	m	•	R.N., etc.	all standard mathematical	
milliliter	mL	at	@	signs, symbols and	
millimeter	mm	compass directions:		abbreviations	
		east	Е	alternate hypothesis	$H_A$
Weights and measures (English)		north	N	base of natural logarithm	e
cubic feet per second	ft <sup>3</sup> /s	south	S	catch per unit effort	CPUE
foot	ft	west	W	coefficient of variation	CV
gallon	gal	copyright	 ©	common test statistics	$(F, t, \chi^2, etc.)$
inch	in	corporate suffixes:	<u> </u>	confidence interval	CI
mile	mi	Company	Co.	correlation coefficient	CI
nautical mile	nmi	Corporation	Corp.	(multiple)	R
		Incorporated	Inc.		K
ounce	OZ	Limited	Ltd.	correlation coefficient	_
pound	lb	District of Columbia	D.C.	(simple)	r
quart	qt			covariance	cov 。
yard	yd	et alii (and others)	et al.	degree (angular )	
TT		et cetera (and so forth)	etc.	degrees of freedom	df
Time and temperature	_	exempli gratia		expected value	E
day	d	(for example)	e.g.	greater than	>
degrees Celsius	°C	Federal Information	FIG	greater than or equal to	≥
degrees Fahrenheit	°F	Code	FIC	harvest per unit effort	HPUE
degrees kelvin	K	id est (that is)	i.e.	less than	<
hour	h	latitude or longitude	lat. or long.	less than or equal to	≤
minute	min	monetary symbols	_	logarithm (natural)	ln
second	S	(U.S.)	\$, ¢	logarithm (base 10)	log
		months (tables and		logarithm (specify base)	$\log_{2}$ , etc.
Physics and chemistry		figures): first three		minute (angular)	'
all atomic symbols		letters	Jan,,Dec	not significant	NS
alternating current	AC	registered trademark	®	null hypothesis	$H_{O}$
ampere	A	trademark	TM	percent	%
calorie	cal	United States		probability	P
direct current	DC	(adjective)	U.S.	probability of a type I error	
hertz	Hz	United States of		(rejection of the null	
horsepower	hp	America (noun)	USA	hypothesis when true)	α
hydrogen ion activity (negative log of)	pH	U.S.C.	United States Code	probability of a type II error (acceptance of the null	
parts per million	ppm	U.S. state	use two-letter	hypothesis when false)	β
parts per thousand	ppt,		abbreviations	second (angular)	,
1 1	%°		(e.g., AK, WA)	standard deviation	SD
volts	V			standard error	SE
watts	W			variance	<del>-</del>
•	• •			population	Var
				sample	var
				p	

## REGIONAL INFORMATION REPORT NO. 1J07-09

## 2007 YAKUTAT SET GILLNET FISHERY MANAGEMENT PLAN

By
Gordon F. Woods
Alaska Department of Fish and Game, Division of Commercial Fisheries, Yakutat

Alaska Department of Fish and Game Division of Commercial Fisheries, Publications Section 802 3rd, Douglas, Alaska, 99824-0020

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Gordon F. Woods, Alaska Department of Fish and Game, Division of Commercial Fisheries, P.O. Box 49 Yakutat, AK 99689 U.S. A.

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#### **ABSTRACT**

The 2007 Yakutat set gillnet fishing seasons and fishing periods will open by regulation on Sunday as specified in 5 AAC 30.310 and 5 AAC 30.320. The Alsek River will open on Sunday, June 3, Yakutat Bay will open on Sunday, June 10, the Situk-Ahrnklin Inlet and Manby Shore Outside Waters will open on Sunday, June 17. All Yakutat District fisheries will be open by Sunday, June 24. Set gillnet fisheries are managed by adjusting fishing times and areas in response to inseason assessments of run strength. Management strategies will concentrate on sockeye and Chinook salmon in June and July. Following the first Sunday in August, fall fishing periods will go into effect and the emphasis for management strategies will switch to coho salmon. The East Alsek River is the sole exception due to the late timing of the sockeye salmon run, and the river will be managed for sockeye salmon into September. No formal preseason forecast program exists for the Yakutat salmon runs. Returns are expected to be average to above average for sockeye salmon, and average to below above average for coho salmon.

Keywords: Yakutat, set gillnet, fishing seasons, fishing periods, Chinook, sockeye, coho, pink, chum salmon.

#### INTRODUCTION

The Yakutat area encompasses the waters of Alaska between Cape Suckling and Cape Fairweather. The area is divided into two fishing districts: the Yakataga District between Cape Suckling and Icy Cape, and the Yakutat District between Icy Cape and Cape Fairweather. All five salmon species are harvested in the Yakutat area, with coho, sockeye, Chinook, and pink salmon comprising the majority of the catch in order of commercial value.

Set gillnet gear is the only net gear permitted in the Yakutat area. About 170 commercial setnet entry permits are renewed annually. Setnet permit holders in the Yakutat area do not have registered sites and may fish in any open fishing area. They may also move between fishing areas during the season as long as not more than one area is fished concurrently.

There are 25 unique setnet fisheries in the Yakutat area. Most of these fisheries target sockeye salmon from mid-June through July and coho salmon in August and September. The only targeted pink salmon fishery occurs in the southeast portion of Yakutat Bay on fish returning to Humpback Creek. Set gillnet fisheries in the Yakataga District primarily harvest coho salmon.

In January, 2006 the Alaska Board of Fisheries (BOF) adopted two regulations that permanently changed the weekly fishing periods and fishing seasons for the Yakutat Area from Monday to Sunday of each week. In 2007 the Alsek River will open on the first Sunday in June (June 3), Yakutat Bay will open on the second Sunday in June (June 10), and the Situk-Ahrnklin Inlet and Manby Shore Outside Waters will open on the third Sunday in June (June 17). By the fourth Sunday in June (June 24) all fisheries in the Yakutat District may be open if expected returns are surplus to escapement needs.

#### ANTICIPATED SALMON RETURN

No formal preseason forecast program exists for the Yakutat salmon runs. Preseason expectations are based on parent-year spawning escapements, commercial catch trends, local observations of rearing conditions, and information on year-class strength. The 2007 Yakutat area salmon runs are expected to be average to above average for sockeye salmon and average to below average for coho salmon. Detailed projections by specific drainage area are presented on page 9.

#### FISHERY MANAGEMENT

Set gillnet fisheries in the Yakutat area are managed by adjusting fishing times and areas in response to inseason assessments of run strength. These actions are taken to provide adequate spawning escapements and to allow harvests of salmon that are surplus to escapement goals.

Inseason assessment methods include both fishery performance and spawning escapement information. In the glacial systems, fishery performance data is utilized for management because poor visibility prevents the accurate observation of spawning escapements.

During 2007, the major fishing areas can be expected to open on the following dates:

Yakutat District			
Area		Opening Date	
Alsek River		3 June	
Dangerous River		10 June	
Yakutat Bay (south of 59°40' N lat.)		10 June	
Manby Shore Ocean		17 June	
Situk-Ahrnklin Inlet		17 June	
Lost River		by Emergency Order	
East River		by Emergency Order	
Akwe River		24 June	
Manby Shore Inland		24 June	
Remainder of the Yakutat District		24 June	
Italio River		by Emergency Order	
	Yakataga D	District	
Season	Area	Opening Date	
Sockeye Season		by Emergency Order	
Coho Season			
	Kaliakh River	August 5	
	Tsiu River	by Emergency Order	
		(around August 22)	

#### 2007 SUMMER MANAGEMENT PLAN

This management plan concentrates on the major fisheries in the Yakutat area. Information on areas that are fished only occasionally is available from the Yakutat area management biologist listed at the end of the plan. Most Yakutat gillnet openings for sockeye salmon will generally run from 6:00 a.m. Sunday through 6:00 p.m. Tuesday.

#### ALSEK RIVER

The Alsek River, located 45 miles southeast of Yakutat, is a major transboundary river that drains a large area east of the coastal mountain range. The Alsek extends approximately 130 miles from its mouth upriver into the Yukon Territory of Canada. The U.S./Canada border is approximately 40 miles upstream from the river mouth. The river supports large populations of Chinook, sockeye, and coho salmon, and small populations of pink and chum salmon. Alaskan set gillnet fisheries target sockeye and coho salmon. Canadian subsistence and sport fisheries target sockeye and Chinook salmon.

Commercial salmon landings from the Alaskan portion of the Alsek River averaged approximately 17,800 sockeye, 2,800 coho, and 600 Chinook salmon annually from 2002 through 2006. The Canadian subsistence and sport harvest has averaged approximately 230 Chinook, 1,800 sockeye, and 150 coho salmon during the same period. Subsistence and sport fisheries in the Alaskan portion of the river are relatively minor, harvesting about 200 salmon annually.

Historically, the set gillnet fishery targeted Chinook salmon during May in the Alaskan portion of the river. However, due to what was thought to be depressed runs, the directed Chinook salmon fishery has been closed since 1962 and Chinook salmon have been harvested only incidentally during the sockeye salmon fishery in early June. The Northern Panel of the Pacific Salmon Commission has reached bilateral agreement to reopen the Stikine and Taku Inlet gillnet fisheries, and they also established a test fishery for the Alsek to begin in late May of 2005 and 2006. The test fishery will again be conducted in 2007 above the common property gillnet fishing area on the Alsek, and harvest shall not exceed 500 Chinook salmon. It is anticipated that the Northern Panel will at some point reach bilateral agreement to reopen the Alsek River to commercial fishing for Chinook salmon in May. In January, 2006 the BOF adopted regulatory language to allow for this fishery should agreement be reached. The 2007 run of Chinook salmon is expected to produce fish surplus to the current Klukshu River escapement goal of 1,100 to 2,300 fish.

The 2007 overall Alsek drainage sockeye salmon run is expected to be approximately 75,300 fish; this is above the recent 10-year average of 66,500 fish. The principle contributing brood years will be 2002 (Klukshu escapement of 23,600 sockeye salmon) and 2003 (Klukshu escapement of 37,000 sockeye salmon). Both the early and late run segments of the Alsek sockeye run are expected to be above average in 2007. The escapement goal for 2007 is a total of 7,500 to 15,000 sockeye past the Klukshu weir. Escapement counts in U. S. tributaries were below average in 2002 and 2003, but surveys were affected by inclement weather during those years.

The Alsek will open downstream from a marker located three miles below the southern end of Alsek Basin on the first Sunday in June (June 3). Weekly openings will initially be set at 24 hours. The duration of weekly fishing periods will be based on fishery performance and Klukshu

weir data. Gillnets will be restricted to a maximum mesh size of 6 inches through July 1 to minimize Chinook salmon harvest. Fishing time will be based on a comparison of current to historical fishery performance data.

The Alsek River surf fishing area is expected to be open during the same periods as the in-river fishery. The surf fishing area includes the shoreline, 0.75 of a mile in each direction, from the river mouth to the outermost bar where the surf breaks.

#### DANGEROUS RIVER

The Dangerous River will be opened downstream from the Dangerous River Bridge on June 10. Catch and effort from this system has been sporadic. Fewer than three permits fished the Dangerous during the 2002 parent year, and catch records are confidential. The Dangerous River is seldom fished for coho salmon.

#### YAKUTAT BAY

Three separate set gillnet fisheries occur in Yakutat Bay. The Yakutat Bay fishery occurs in the ocean waters of Yakutat Bay south of 59°40' N. latitude and will open on the second Sunday of June (June 10). The Manby Shore Ocean fishery encompasses the ocean waters of Yakutat Bay north of 59°40' N. latitude and will open the third Sunday of June (June 17). The Manby Shore Inside Waters fishery will open on the fourth Sunday of June (June 24) in streams along the northern shore of Yakutat Bay.

#### YAKUTAT BAY AND MANBY SHORE OCEAN FISHERIES

Both the Yakutat Bay and Manby Shore Ocean fisheries harvest mixed stocks of sockeye salmon. Tag recovery data collected in 1987 indicated that a major portion of the Yakutat Bay sockeye harvest was of Situk origin. Because of the high Situk River sockeye contribution to the Yakutat Bay and Manby Shore ocean fisheries, both fisheries will be managed to conserve or harvest Situk River sockeye from the third week in June through the third week of July. The Yakutat Bay fishery will open on Sunday, June 10 for 2.5 days. The weekly fishing period will be limited to a maximum of 4.5 days due to the mixed stock nature of the ocean fisheries and the potentially adverse impact on weaker Yakutat area stocks.

The Manby Shore fishery will open on Sunday, June 17. Weekly fishing periods will depend on Situk River sockeye salmon run strength.

#### SITUK-AHRNKLIN AND LOST RIVER

The Situk-Ahrnklin Inlet is the site of the oldest and, historically, most productive fishery in the Yakutat area. Located about nine miles by road from Yakutat, the Situk-Ahrnklin fishery normally supports the largest concentration of fishing effort in Yakutat (up to 100 permits). Fishing occurs primarily in the inlet, although some fishing occurs at the river mouth and in the adjoining surf-fishing area. Sockeye salmon make up the major portion of the harvest during the summer and coho salmon dominate the catch during the fall. Situk-Ahrnklin catches have averaged about 55,000 sockeye, 108,000 coho, 40,000 pink, and 930 Chinook salmon (2002–2006).

The 2002 brood year Situk River sockeye salmon escapement was approximately 69,000 fish. Return per spawner data indicates that the 2007 Situk River sockeye salmon run could exceed 200,000 fish. The sockeye salmon Biological Escapement Goal (BEG) range for the Situk River drainage is 30,000 to 70,000 fish through the weir. A mid-range escapement of 50,000 could

leave somewhere in the vicinity of 150,000 fish available for harvest. Sockeye salmon returns in recent years have not lived up to preseason expectations, and the actual surplus available for harvest may not approach 150,000 sockeye salmon.

The Situk-Ahrnklin Inlet will open initially on Sunday, June 17. Fishing periods will be based on fishery performance and escapements through the Situk River weir. A run-timing model will be used to estimate the total Situk River sockeye salmon run after several weeks of harvest and escapement data are available. A similar model will be used to project Situk Chinook salmon abundance.

Chinook salmon are taken incidentally in the set gillnet fishery, and the Situk commercial catch of Chinook salmon is largely dependent on fishing time allowed for sockeye salmon. The preseason forecast for Situk River Chinook salmon (656) is poor in 2007 for the third year in a row. Conservation measures will be necessary to reduce the incidental harvest of Chinook salmon, and the season will open with the "non-sale" of Chinook salmon provisions that were also in place in 2005 and 2006. Conservation and allocation objectives associated with the harvest of Situk River Chinook salmon are described in the Situk-Ahrnklin Inlet and Lost River Chinook Management Plan (5 AAC 30.365).

Management options for maximizing harvest of Situk River pink salmon are limited due to the overlap in run timing with sockeye and coho salmon. Escapement goals for pink salmon in the Situk River are 42,000 to 105,000 in even years and 54,000 to 200,000 in odd years. The parent year (2005) escapement past the Situk weir was 280,000 pink salmon.

Steelhead trout in post-spawning condition occasionally accumulate in the Situk River prior to the time they emigrate to the ocean. When the emigration is late, there is a potential for the Situk setnet fishery to harvest a larger than normal number of adults. The rate of emigration of spawned-out steelhead often increases following periods of heavy rainfall. If a major emigration is expected to occur during a scheduled gillnet fishing period, the opening may be delayed for a few days to reduce the incidental harvest of steelhead.

During the winter of 1998/1999 the Lost River changed course and flowed into the Situk/Ahrnklin Estuary instead of the Gulf of Alaska. The Lost River continues to flow into the Situk/Ahrnklin Estuary. Prior to the 1999 fishing season ADF&G developed a management plan for the Lost River and Situk/Ahrnklin Estuary with the intent of meeting escapement requirements for the Lost River. This plan closed the Lost River and the North bank of the Situk/Ahrnklin Estuary between an ADF&G regulatory marker approximately 100 yards above the confluence of the Lost River and the Situk/Ahrnklin Estuary and a marker located near the mouth of the Situk/Ahrnklin Estuary. The plan went into effect at the beginning of the season and the Lost River (Tawah Creek) was surveyed weekly throughout the season to monitor escapement. The lower marker was moved closer to the Lost River as escapement objectives in the Lost River were met. Sockeye and coho salmon escapement goals for both the Lost River and the Situk/Ahrnklin system have been consistently met using this management scenario, and similar measures will be taken in 2007.

The weekly escapement surveys on the Lost River over the years have indicated that sockeye salmon run timing is different for Lost River and Situk/Ahrnklin stocks. No fish have been observed in Tawah Creek prior to July 10. The north bank of the Situk/Ahrnklin Estuary from a marker at the mouth of the estuary (500 yards) to a marker 100 yards above the confluence of the Lost River will be closed to commercial set gillnet fishing beginning July 10. Prior to this date

the closed area will be confined to 100 yards on each side of the mouth of the Lost River. It is anticipated that the Lost River will remained closed for the entire sockeye season. The intent of these closures is to achieve the escapement goal (peak float count) of between 1,000 and 2,300 sockeye salmon that has been established for the Lost River and to maximize fishing opportunity in the Situk/Ahrnklin estuary. Regulatory marker placement may change during the course of the season as escapement or river channel movement warrants.

#### EAST RIVER

The East River is a short, clear river originating from the upwellings and local drainage of the eastern portion of Dry Bay. The area open to inriver commercial fishing extends from the mouth to two miles upstream; the adjacent ocean waters within two miles of the mouth in each direction out to 500 yards from the shore at low tide are also open to commercial fishing. The surf and ocean areas are open during the same periods as the inriver fishery.

Prior to 1994 the East River had been one of the most productive sockeye salmon fisheries in the Yakutat area, however salmon catches have dramatically declined. From 1994–1998, average catch was about 37,000 sockeye, 1,500 chum, and 7,400 coho salmon. The river was closed to commercial fishing for sockeye during the 1999, 2000, 2001, and 2002 seasons. The East was opened during coho season in 2002, and for both sockeye and coho salmon from 2003-2006. During these recent-year openings sockeye salmon catches have steadily increased, from a low of 2,500 in 2003 to a high of almost 15,000 in 2006.

The East River will be managed to achieve the BEG of 13,000 to 26,000 sockeye salmon. Escapement will be closely monitored, and the East will probably not open until the lower end of the escapement goal is attained. In 2006 the East opened during the third week of July. If the fishery does open in 2007, the duration of the weekly fishing periods will be based on escapement observations. Returns to the East River are predominantly age 4 (0.4). The 2003 parent-year escapement was estimated at 34,000 sockeye salmon, above the BEG range. Sockeye salmon returns have not equaled parent-year returns since 1998.

#### AKWE RIVER

The Akwe River is a glacial river system located about 35 miles south of Yakutat. The lower seven miles of the river are wide and shallow and flow parallel to the beach before entering the ocean. The commercial fishery occurs in this lower portion of the river. The 2002–2006 average Akwe River harvest was approximately 7,000 sockeye and 200 Chinook salmon. Historically, the Akwe coho salmon harvest has averaged approximately 4,000 fish, but the river has not been fished for coho salmon in four of the recent five years due to market conditions.

The sockeye salmon return to the Akwe River is expected to be average in 2007 based on parent-year fishery performance and effort. The 2002 parent year harvest of 3,800 sockeye salmon was the lowest catch in the past five years, but was near the long-term historical average. Parent-year escapement counts were minimal due to the turbidity of the river. The sockeye fishery is scheduled to open on Sunday, June 24 and the season will extend through early August. Inseason management will be based on fishery performance and index escapement counts, and reductions in the normal 2.5-day weekly fishing period may be necessary to insure adequate escapement. An escapement goal (peak aerial count) of 600 to 1,500 sockeye salmon has been established for the Akwe River.

The Akwe River will be open upstream of the markers located about 0.5 miles from the terminus of the Akwe River lagoon at mean low tide to the upper markers located 2.5 miles downstream from the westernmost end of the Sand Dunes, a fishing area of about four miles.

#### MANBY SHORE INLAND FISHERY

Management of the Manby Shore inland fisheries (waters upstream of the mean high-tide line) will be based on the abundance of local stocks. During the summer, these fisheries harvest salmon primarily from Manby and Sudden Streams. A 2.5-day weekly fishing period can be expected during the initial opening period scheduled for June 24. Additional open periods will depend on fishery performance.

## **HUMPBACK (HUMPY) CREEK FISHERY**

The Humpy Creek fishery located in the southeastern portion of Yakutat Bay targets pink salmon. A below average run is expected at Humpy Creek for the 2007 season. Humpy Creek was not surveyed during the 2005 parent year. Inseason management of this fishery will be based on observed pink salmon escapement to Humpy Creek and the availability of pink salmon in the Yakutat Bay fishery. Escapement goals (peak aerial count) of 3,300 to 8,000 pink salmon in even years and 7,000 to 18,000 pink salmon in odd years have been established for Humpy Creek. There has not been a directed fishery on Humpy Creek since 1988.

#### ITALIO RIVER

The Italio River is located adjacent to the Akwe River. The Italio supports small runs of sockeye and coho salmon. The course of the Italio River changed and flowed into the lower Akwe River during the winter of 1986/1987 and both rivers now share a common mouth. Both Italio and Akwe salmon stocks are present in this area and for some distance upstream in each river. Determination of Akwe or Italio run strengths based on fishing success in the junction area is not possible. Therefore, the junction and a portion of each river above the junction is closed to set gillnet fishing.

The Italio River sockeye salmon fishery has not been open since 1987. When the Italio River changed channel and entered the Akwe River lagoon, the homing ability of Italio River sockeye salmon may have been negatively affected. As a result, it may take several years for the productivity of the Italio River sockeye stock to return to historic levels. The Italio River fishery may open by emergency order if good escapements are observed. The 2002 parent-year escapement for this year's sockeye return was below the lower range of the escapement goal in place at that time of 2,500 to 7,000. Based on an analysis completed in the winter of 2002–2003 the escapement goal for the Italio was rescinded and no formal goal is in place due to changes in productivity of the system.

#### YAKATAGA DISTRICT

The Yakataga District is not expected be open during the sockeye season in 2006. It will open by emergency order sometime in August based on coho escapement.

#### 2007 FALL MANAGEMENT PLAN

Fall fishing is directed primarily at harvesting coho salmon, although sockeye as well as fall chum salmon can contribute to the catches on the East River. The fall fishing season generally will start on the first Sunday of August. At that time, the regulatory weekly fishing period

changes in most areas to a 12:01 p.m. opening, and 12:00 noon, closing time. During the fall, set gillnet fishing occurs in both the Yakutat and Yakataga Districts. In the Yakutat District, the fall coho salmon fishery occurs primarily in the same areas as the summer sockeye salmon fishery. In the Yakataga District, there are areas where only coho salmon fishing takes place.

Overall catches and escapements of coho salmon in the Yakutat area were average in the parent year (2003). The Situk River escapement counts in 2003 were in the middle of the escapement goal range. Escapement counts for the Tsiu River were over the top end of the BEG range. The recent 15-year history of coho returns to Yakutat has been excellent, though returns since 2003 have been average for the most part. The 2007 coho salmon run is expected to be average areawide.

A potential concern regarding Yakutat area coho salmon is based on both climatic and geological effects. Yakutat has been through a five-year period of drought. The land is rising away from the water table due to some of the highest rates of isostatic rebound found in the world. These factors dramatically affect fresh water rearing habitat for coho salmon. Forest Highway 10 crosses many streams, tributaries of the Situk and Ahrnklin Rivers and of Seal Creek. At least five of these streams, although listed in the Anadromous Stream Catalog as important for both spawning and rearing of coho salmon, no longer exist. These streams have not had any water in them at all for almost five years. It is possible that these events will negatively impact coho salmon production in the Yakutat area.

#### YAKUTAT DISTRICT

Fall fishing will begin on Sunday, August 5 in the Yakutat District, except in the East River where management will continue to be based on sockeye salmon run strength through most of August and into September. The initial fishing periods can be expected to extend from 12:01 p.m. Sunday through 12:00 noon Wednesday. Inseason management of all Yakutat District fall fisheries will be based on fishery performance data and inseason coho escapement surveys.

The following BEGs have been established for coho salmon in the Yakutat District: East River 2,500 to 8,500; Akwe River 1,800 to 5,000; Italio River 1,400 to 3,600; Situk River 3,300 to 9,800; and Lost River 2,200 to 6,500.

Fishing time and area adjustments will be made for each river as needed for conservation. A closed area can be expected in the Yahtse River to protect schools of milling coho salmon at tributary mouths. The actual closed water area will be based on inseason observations of coho schooling behavior, which is related to river flow conditions. Several small coho streams are located along the forelands west of the Yahtse River to Cape Yakataga. Most of these streams have very small numbers of spawning coho and cannot support in-river set gillnet fisheries. The area from the Yahtse River to Cape Yakataga will remain closed until harvestable surpluses are evident.

#### YAKATAGA DISTRICT

The major fisheries in the Yakataga District occur for coho salmon on the Kaliakh and Tsiu Rivers, located about 125 miles northwest of Yakutat. The Tsiu River is the more productive of the two rivers; in recent years, catches have averaged about 56,000 coho salmon. The Kaliakh, which had not been fished since 1999, had minor recorded effort in 2004, no effort in 2005, and minor effort again in 2006. The Tsiu recorded minor effort in 2004 and supported a more normal fishery in 2005 and 2006. Prior to that it had not been fished since 2001 due to market

conditions. Parent-year (2003) escapement count of 34,000 coho salmon was just above the BEG range of 10,000 to 29,000 fish. The Kaliakh was not surveyed in 2003. The 2007 coho salmon return is expected to be average in both the Tsiu and Kaliakh Rivers. The BEG range for the Kaliakh is 4,000 to 14,000 coho salmon.

The Tsiu River opening date and fishing periods will be determined from observed escapements above and below the regulatory markers. The Kaliakh River weekly fall fishing periods will normally open from 9:00 a.m., Sunday through 9:00 a.m., Wednesday, beginning on August 6. Market conditions will determine whether or not the Yakataga District is fished in 2007. The area is remote and fish must be flown to markets. It is possible that it will be economically unfeasible to fish the district.

#### 2007 SALMON RUN EXPECTATIONS

#### SOCKEYE SALMON

#### **Alsek River**

The parent-year sockeye salmon escapement was approximately 25,000 through the Klukshu River Weir. A total catch of around 15,000–20,000 sockeye is expected.

#### **East River**

The parent year escapement was approximately 34,000 sockeye salmon. A normal return this year could lead to a catch of approximately 8,000–15,000 fish. Effort will probably be limited to a few Alsek River fishermen.

#### **Akwe River**

No parent-year escapement counts are available. Based on catch, the runs in both parent years, 2002 and 2003, were average, and the Akwe has shown above average sockeye salmon production in recent years. A catch of 5,000 to 10,000 sockeye is expected for 2007 based on parent-year fishery performance and effort.

#### Italio River

Parent-year escapements were low and it is unlikely there will be a directed sockeye salmon fishery in the Italio River in 2007.

#### Situk River

The parent-year escapement was slightly approximately 69,000 sockeye salmon. A catch of around 60,000 to 80,000 sockeye, with an escapement of about 50,000 sockeye, is expected.

#### COHO SALMON

#### Tsiu/Kaliakh River

If there is any effort, a catch of over 30,000 coho may be possible in the Tsiu River in 2007. In the Kaliakh River, a harvest of 1,000 to 3,000 coho is possible.

#### Area-wide

Parent-year escapements were average in most areas. Based on recent trends in the fishery, the run is expected to be average to below average. The area wide set gillnet catch is expected to be

about 80,000 to 150,000 coho, but effort, and how it is distributed throughout the area, will largely determine how many coho are harvested.

## **FISHERY CONTACTS**

The following Alaska Department of Fish and Game, Division of Commercial Fisheries staff may be contacted regarding this management plan:

Scott Kelley Region I Supervisor	P.O. Box 240020 Douglas, Alaska 99824 (907) 465-4250
Bill Davidson Region I Management Coordinator	304 Lake St. Room 104 Sitka, Alaska 99835 (907) 747-6688
Gordie Woods Area Management Biologist	P.O. Box 49 Yakutat, Alaska 99689 (907) 784-3255